



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,251	04/14/2004	Ian R. Ollmann	APL1P301/P3248	8088
22434	7590	07/02/2007		
BEYER WEAVER LLP P.O. BOX 70250 OAKLAND, CA 94612-0250			EXAMINER TAN, ALVIN H	
			ART UNIT 2173	PAPER NUMBER
			MAIL DATE 07/02/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/825,251	<b>Applicant(s)</b> OLLMANN ET AL.	
	<b>Examiner</b> Alvin H. Tan	<b>Art Unit</b> 2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/21/06</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Remarks***

1. Claims 1-37 have been examined and rejected. This is the first Office action on the merits.

### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claim 35 is rejected under 35 U.S.C. 101 because the claim is directed towards non-statutory subject matter. Computer programs claimed as computer listings per se. They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2173

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-23, 26, and 35-37 have been rejected under 35 U.S.C. 102(b) as being anticipated by Nielsen (U.S. Patent No. 6,339,437 B1).

**Claims 1-23, 26 (Method)**

**Claim 35 (Computer Readable Medium)**

**Claim 36 (Apparatus)**

**Claim 37 (System)**

5-1. Regarding claims 1, 35, 36, and 37, Nielsen teaches the claim comprising obtaining one or more location criteria used to identify one or more desired locations in the file, by disclosing changing the appearance of a scroll bar thumb to reflect the amount of relevant content which would be visible in a display window at the current location of the scrolling thumb on the scrollbar [*column 1, lines 33-45*]. A position of a scroll bar thumb is used to identify a location within a file [*column 5, lines 47-57*].

Nielsen teaches identifying one or more displaying criteria to be used to designate the one or more desired locations, locating one or more desired locations in the file according to the location criteria, and displaying the scroll bar by applying the one or more display criteria to one or more locations of the scroll bar corresponding to the one or more desired locations in the file, by disclosing that once the number of relevance markers is determined for a particular segment of text, a system attribute, such as the color of an object displayed will be altered to reflect the number of those

Art Unit: 2173

markers that would be displayed on the screen if the scrolling were stopped at that point  
*[column 6, lines 1-7].*

5-2. Regarding claim 2, Nielsen teaches the claim wherein the scroll bar is generated such that segments of the scroll bar indicate relative importance of contents in the corresponding locations of the displayed file, by disclosing using the scroll bar to reflect the relevance of content in the document *[column 1, lines 33-38].*

5-3. Regarding claim 3, Nielsen teaches the claim wherein the scroll bar includes one or more horizontal segments, each of the horizontal segments indicating relative importance of contents of the displayed file, by disclosing that the scroll thumb, made up of two horizontal segments, may change color to reflect relevance of content *[column 6, lines 49-55].*

5-4. Regarding claim 4, Nielsen teaches the claim wherein each of the horizontal segments is displayed with at least one of a color, hue, intensity, and transparency indicating its relative importance, by disclosing using color as an indicator *[column 6, lines 24-32].*

5-5. Regarding claim 5 and 6, Nielsen teaches the claim wherein displaying the scroll bar further comprises applying a background display criteria to a plurality of locations of the scroll bar corresponding to remaining locations in the file that do not include the

Art Unit: 2173

desire locations and displaying one or more of the plurality of locations in the file by applying the display criteria and the background display criteria, by disclosing that only the scroll thumb itself may have its color changed *[column 6, lines 49-55]*. Thus, other parts of the scroll bar would have its own default background display.

5-6. Regarding claim 7, Nielsen teaches the claim wherein the plurality of locations are a plurality of rows in the file, by disclosing that the scroll thumb is used to identify a location within a document containing rows of text *[column 4, lines 37-39]*.

5-7. Regarding claim 8, Nielsen teaches the claim further comprising displaying one or more of the plurality of locations in the file by applying the display criteria, by disclosing that once the number of relevance markers is determined for a particular segment of text, a system attribute, such as the color of an object displayed will be altered to reflect the number of those markers that would be displayed on the screen if the scrolling were stopped at that point *[column 6, lines 1-7]*.

5-8. Regarding claim 9, Nielsen teaches the claim wherein the plurality of locations are a plurality of rows in the file, by disclosing that the scroll thumb is used to identify a location within a document containing rows of text *[column 4, lines 37-39]*.

5-9. Regarding claim 10, Nielsen teaches the claim further comprising displaying contents of the file by applying the display criteria, by disclosing that once the number of

relevance markers is determined for a particular segment of text, a system attribute, such as the color of an object displayed will be altered to reflect the number of those markers that would be displayed on the screen if the scrolling were stopped at that point *[column 6, lines 1-7]*.

5-10. Regarding claim 11, Nielsen teaches the claim wherein the location criteria is used to identify one or more errors, by disclosing that the user submits a query to be searched within a document *[column 4, lines 14-36]*. Based on the user submitted query, relevance markers are shown indicating the locations of the word within the document *[column 4, lines 37-45]*. Thus, the user may submit any term or phrase such as "error".

5-11. Regarding claim 12, Nielsen teaches the claim wherein the location criteria is used to identify one or more errors, by disclosing that the user submits a query to be searched within a document *[column 4, lines 14-36]*. Based on the user submitted query, relevance markers are shown indicating the locations of the word within the document *[column 4, lines 37-45]*. Thus, the user may submit any term or phrase such as "warning".

5-12. Regarding claim 13, Nielsen teaches the claim further comprising obtaining one or more user-defined location criteria, by disclosing that the user controls the location of

Art Unit: 2173

the scroll thumb *[column 5, lines 34-46]*. Additionally, the user submits a query, which determines the marked locations in the document *[column 4, lines 14-36]*.

5-13. Regarding claim 14, Nielsen teaches the claim further comprising obtaining one or more user-defined display criteria, by disclosing that the user can set a color based on a number of relevance markers that would be visible at a given scrolling location *[column 6, lines 38-48]*.

5-14. Regarding claim 15, Nielsen teaches the claim wherein the location criteria includes one or more rankings associated with one or more content-dependent criteria, by disclosing *[figure 6]*.

5-15. Regarding claim 16, Nielsen teaches the claim wherein each of the one or more display criteria includes at least one of color, hue, intensity, and transparency, by disclosing using color as an indicator *[column 6, lines 24-32]*.

5-16. Regarding claim 17, Nielsen teaches the claim further comprising obtaining one or more user-defined display criteria, by disclosing that the user can set a color based on a number of relevance markers that would be visible at a given scrolling location *[column 6, lines 38-48]*.



Art Unit: 2173

5-17. Regarding claim 18, Nielsen teaches the claim wherein each of the one or more display criteria is associated with one or more of the location criteria, by disclosing that once the number of relevance markers is determined for a particular segment of text, a system attribute, such as the color of an object displayed will be altered to reflect the number of those markers that would be displayed on the screen if the scrolling were stopped at that point *[column 6, lines 1-7]*.

5-18. Regarding claim 19, Nielsen teaches the claim further comprising obtaining one or more user-defined display criteria, by disclosing that the user can set a color based on a number of relevance markers that would be visible at a given scrolling location *[column 6, lines 38-48]*.

5-19. Regarding claim 20, Nielsen teaches the claim further comprising obtaining one or more user defined location criteria, by disclosing that the user controls the location of the scroll thumb *[column 5, lines 34-46]*. Additionally, the user submits a query, which determines the marked locations in the document *[column 4, lines 14-36]*.

5-20. Regarding claim 21, Nielsen teaches the claim further comprising obtaining one or more user-defined display criteria, by disclosing that the user can set a color based on a number of relevance markers that would be visible at a given scrolling location *[column 6, lines 38-48]*.

Art Unit: 2173

5-21. Regarding claim 22, Nielsen teaches the claim wherein each of the one or more display criteria is associated with one or more of the location criteria, by disclosing that once the number of relevance markers is determined for a particular segment of text, a system attribute, such as the color of an object displayed will be altered to reflect the number of those markers that would be displayed on the screen if the scrolling were stopped at that point [*column 6, lines 1-7*].

5-22. Regarding claim 23, Nielsen teaches the claim wherein each of the one or more display criteria is associated with one or more of the location criteria, by disclosing that once the number of relevance markers is determined for a particular segment of text, a system attribute, such as the color of an object displayed will be altered to reflect the number of those markers that would be displayed on the screen if the scrolling were stopped at that point [*column 6, lines 1-7*].

5-23. Regarding claim 26, Nielsen teaches the claim wherein the background display criteria includes at least one of color, hue, intensity, and transparency because the default background for the scroll bar must have some sort of color.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 24 and 25 rejected under 35 U.S.C. 103(a) as being unpatentable over Nielsen (U.S. Patent No. 6,339,437 B1) and Eick (U.S. Patent No. 5,644,692).

7-1. Regarding claim 24, Nielsen teaches the invention substantially as claimed. See section 5-1. Nielsen does not expressly teach the claim further comprising obtaining user-defined background display criteria. Eick teaches a scroll bar with markers indicating specific details of a document *[column 23, line 22 to column 24, line 14]*. Various types of attributes are associated with each line within a document by using a set of colors on the scroll bar *[column 27, lines 46-62]*. Conditional displays of an attribute are set up by specifying a foreground and background attribute type for the scroll bar *[column 28, lines 12-19, 36-44]*. This provides further information to a user regarding which portions of a document are related to a plurality of attribute values *[column 2, lines 18-27]*. Since Nielsen teaches a scroll bar for displaying relevant information about a document *[column 1, lines 33-38]*, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include user-defined foreground and background display criteria for displaying portions of the scroll bar containing certain attributes, as taught by Eick. This provides further information to a user regarding which portions of a document are related to a plurality of attribute values.

Art Unit: 2173

7-2. Regarding claim 25, Nielsen and Eick teach the claim wherein the background display criteria includes at least one of color, hue, intensity, and transparency because the default background for the scroll bar must have some sort of color. Additionally, markers indicating the attributes include lines of a different color or a color of the scroll bar *[Eick, column 24, lines 1-14]*.

8. Claims 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nielsen (U.S. Patent No. 6,339,437 B1) and McGee, III et al (U.S. Patent No. 6,990,496 B1), herein after, McGee.

8-1. Regarding claim 27, Nielsen teaches the invention substantially as claimed. See section 5-1. Although Nielsen teaches that the number of relevance markers are counted for a particular segment of text, *[column 6, lines 1-37]*, Nielsen does not expressly teach the claim wherein locating one or more desired locations in the file according to the location criteria comprises determining a reference count for each row in the file, the reference count indicating a number of the desired locations in the corresponding row. McGee teaches a text classifier that reads text having one or more keywords contained within one or more segments within the text and in response to identifying at least one keyword within a line of text, classifying that line of text *[column 2, lines 36-42]*. As shown in *[figure 4]*, the number of keywords in each line is determined. Classifying a line of text based on the number of keywords within it allows users to more easily identify segments of text within a document *[column 2, lines 14-22]*.

Since Nielsen teaches a scroll bar for displaying relevant information about a document based on a query [*column 1, lines 33-38*], it would have been obvious to one of ordinary skill in the art at the time the invention was made to include determining a reference count for each row in the document based on the query in order to classify each line, as taught by McGee. This would provide more detailed information concerning each row and thus, would allow users to more easily identify important sections of text within a document.

8-2. Regarding claim 28, Nielsen and McGee teach the claim wherein displaying the scroll bar by applying the one or more display criteria to one or more locations of the scroll bar corresponding to the one or more desired locations in the file comprises applying the one or more display criteria to the one or more locations of the scroll bar in accordance with the reference count for corresponding rows in the file, by disclosing that a system attribute, such as the color of an object displayed will be altered to reflect the number of relevance markers that would be displayed on the screen if the scrolling were stopped at that point [*Nielsen, column 6, lines 1-7*]. Since the relevance markers are determined for corresponding rows as taught by McGee, the attribute would be displayed based on the reference count for corresponding rows.

8-3. Regarding claim 29, Nielsen and McGee teach the claim further comprising displaying one or more of the plurality of locations in the file by applying the one or more display criteria to the one or more of the plurality of locations in the file in accordance

with the reference count for corresponding rows in the file, by disclosing that a system attribute, such as the color of an object displayed will be altered to reflect the number of relevance markers that would be displayed on the screen if the scrolling were stopped at that point [*Nielsen, column 6, lines 1-7*]. Since the relevance markers are determined for corresponding rows as taught by McGee, the attribute would be displayed based on the reference count for corresponding rows.

9. Claims 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nielsen (U.S. Patent No. 6,339,437 B1), McGee, III et al (U.S. Patent No. 6,990,496 B1), and Mohan et al (U.S. Patent No. 6,970,881 B1).

9-1. Regarding claim 30, Nielsen and McGee teach the invention substantially as claimed. See section 8-1. Although Nielsen and McGee teach that a system attribute, such as the color of an object displayed will be altered to reflect the number of relevance markers that would be displayed on the screen if the scrolling were stopped at that point [*Nielsen, column 6, lines 1-7*] based on the reference counts for each row as discussed above, Nielsen and McGee do not expressly teach dividing the reference count for each row in the file by a total number of reference counts in the file to obtain a row reference count, normalizing the row reference count for each row in the file, and wherein applying the one or more display criteria to the one or more locations of the scroll bar includes applying the one or more display criteria to the one or more locations of the scroll bar in accordance with the normalized row reference count for

corresponding rows in the file. Mohan teaches categorizing and analyzing unstructured information such as documents [*column 1, lines 27-60; column 3, lines 10-25*] in order to provide an intelligent view of the unstructured information [*column 18, lines 5-12*].

Scores for individual key concepts that contributed to a search are averaged for each object returned. If the search was performed using a combination of key concepts and seed concepts, the number of hits for the seed concepts are divided by the total number of hits picked up for all seed concepts in the document to determine how much the seed concept actually contributed to the concept of the document. This is used to obtain a relevancy score for the object as it pertains to a particular search [*column 18, lines 33-45*]. Scores are normalized as discussed in [*column 16, line 30 to column 17, line 15*].

This enables users to view trends within a document. Thus, since Nielsen and McGee teach classifying a line of text based on the number of keywords within it [*McGee, column 2, lines 36-42*] and displaying an attribute on a scroll bar based on a classification [*Nielsen, column 6, lines 1-7*], it would have been obvious to one of ordinary skill in the art at the time the invention was made, to use the method of determining a relevancy score, as taught by Mohan, on each row in the document. This would enable the user to view trends within each row of the document.

9-2. Regarding claim 31, Nielsen, McGee, and Mohan teach the claim further comprising displaying one or more of the plurality of locations in the file by applying the one or more display criteria to the one or more of the plurality of locations in the file in accordance with the normalized row reference count for corresponding rows in the file,

by disclosing that a system attribute, such as the color of an object displayed will be altered to reflect the number of relevance markers that would be displayed on the screen if the scrolling were stopped at that point [*Nielsen, column 6, lines 1-7*]. Since the relevance is determined by the method as taught by Mohan, the attribute would be displayed based on the normalized row reference count for corresponding rows.

10. Claims 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nielsen (U.S. Patent No. 6,339,437 B1), McGee, III et al (U.S. Patent No. 6,990,496 B1), Mohan et al (U.S. Patent No. 6,970,881 B1), and Kline ("Principles and Practice of Structural Equation Modeling", December 2002).

10-1. Regarding claim 32, Nielsen, McGee, and Mohan teach the invention substantially as claimed. See section 9-1. Nielsen, McGee, and Mohan do not expressly teach the claim further comprising applying a non-linear function to each normalized row reference count to generate a non-linear normalized row reference count for each row in the file wherein applying the one or more display criteria to the one or more locations of the scroll bar includes applying the one or more display criteria to the one or more locations of the scroll bar in accordance with the non-linear normalized row reference count for corresponding rows in the file. Kline teaches correcting a positive and negative skew in data by applying a non-linear function to the data [*page 23, number 5; page 24, number 6*]. Preventing a positive and negative skew in a data set of row scores would provide a more even distribution of row scores across the whole document and thus,



Art Unit: 2173

allow the even distribution of colors to represent scores on the scroll bar. Since Nielsen, McGee, and Mohan teach determining the relevance of rows within a document and displaying an attribute on a scroll bar based on a classification [*Nielsen, column 6, lines 1-7*], it would have been obvious to one of ordinary skill in the art at the time the invention was made, to apply a non-linear function to each normalized row reference count as taught by Kline. This would provide a more even distribution of row scores across the whole document and thus, allow the even distribution of colors to represent scores on the scroll bar.

10-2. Regarding claim 33, Nielsen, McGee, Mohan, and Kline teach the claim further comprising displaying one or more of the plurality of locations in the file by applying the one or more display criteria to the one or more of the plurality of locations in the file in accordance with the non-linear normalized row reference count for corresponding rows in the file, by disclosing that a system attribute, such as the color of an object displayed will be altered to reflect the number of relevance markers that would be displayed on the screen if the scrolling were stopped at that point [*Nielsen, column 6, lines 1-7*]. Since the relevance is determined as taught above, the attribute would be displayed based on the non-linear normalized row reference count for corresponding rows.

10-3. Regarding claim 34, Nielsen, McGee, Mohan, and Kline teach the claim wherein the non-linear function is a square-root function [*Kline, page 23, number 5*].

**Conclusion**

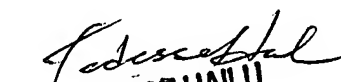
11. The prior art made of record on attached form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R § 111(c) to consider these references fully when responding to this action. The documents cited therein teach similar systems for displaying relative emphasis in a file.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin H. Tan whose telephone number is 571-272-8595. The examiner can normally be reached on Mon-Fri 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on 571-272-4048. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AHT  
Assistant Examiner  
Art Unit 2173

  
TADESSE HAILU  
PRIMARY EXAMINER